

## **State Water Project (SWP) Quarterly Business Report October to December 2008**

### **◆ Water Quality Data is from the Water Data Library (Grab Samples)**

Water quality concentrations in the SWP ranged from moderate in the California Aqueduct at Check 41 and Devil Canyon to high at Banks Pumping Plant (BPP) and Check 13 due to high salinity from the San Joaquin River.

Electrical Conductivity (EC) at BPP and Check 13 ranged from 557 uS/cm to 730 uS/cm while at Check 41 and Devil Canyon, concentrations ranged from 465 uS/cm to 476 uS/cm. North and South Bay Aqueduct EC levels were lower and ranged from 218 to 278 uS/cm and from 392 to 581 uS/cm, respectively. Yet, concentrations at all the locations were below the Article 19 Monthly Average Objective of 440 mg/L (773 uS/cm), see table.

Bromide concentrations in the California Aqueduct ranged from 0.21 to 0.54 mg/L. Concentrations were similar at BPP and Check 13 and ranged from 0.32 mg/L to 0.54 mg/L. Bromide levels were moderate at Check 41 and at Devil Canyon, while North and South Bay Aqueduct exhibited very low bromide concentrations and ranged from 0.03 mg/L to 0.04 mg/L.

Dissolved Organic Carbon (DOC) concentrations were below the California-Bay Delta Authority benchmark of 3 mg/L at all locations except Lake Del Valle (Outlet) and Barker Slough. Concentrations ranged from 1.1 mg/L to of 4.2 mg/L. In the south portion of the California Aqueduct, concentrations were very low, with levels of 1.1 mg/L at Check 41 and 2.3 mg/L at Devil Canyon. In the North and South Bay Aqueducts, concentrations were slightly elevated from 1.9 mg/L at Barker Slough to 4.2 mg/L at Lake Del Valle. These increased DOC levels are typically due to rainfall runoff from the watershed.

The taste and odor compounds MIB and geosmin were low to moderate this fourth quarter at BPP and other stations on the California Aqueduct, but low in the North and South Bay Aqueducts. Their concentrations ranged from non-detect to 10 ng/L.

Groundwater turn-ins to the California Aqueduct from Arvin-Edison Water Storage District, Kern Water Bank Canal, Cross Valley Canal, and Semitropic Water Storage District totaled 116,352 AF during October to December of 2008.

## Monthly grab samples of Constituents of Concern in the State Water Project

			EC	Bromide	DOC	MIB/Geosmin
			(uS/cm)	(mg/L)	(mg/L)	(ng/L)
				Goals		
SWP Facility	Station	Month, 2008	773 <sup>a</sup>	0.05 <sup>b</sup>	3.0 <sup>b</sup>	
California Aqueduct	Banks Pumping Plant	October	557	0.4	2.7	ND to 10
		November	529	0.36	2.1	ND to 8
		December	730	0.54	3.0	1 to 5
	Check 13	October	564	0.32	2.9	ND to 2
		November	546	0.35	2.3	ND to 4
		December	706	0.46	2.7	ND to 3
	Check 41	October	465	0.25	1.2	ND to 1
		November	471	0.21	1.1	ND to 2
		December	545	0.37	1.2	ND to 2
	Devil Canyon Afterbay	October	476	0.22	2.3	1 to 6
		November	529	0.25	1.3	1 to 2
		December	523	0.33	1.9	1 to 2
South Bay Aqueduct	Del Valle Check 7	October	581	0.37	2.8	ND to 6
		November <sup>c</sup>	No Data	No Data	No Data	1 to 3
		December <sup>c</sup>	No Data	No Data	No Data	No Data
	Lake Del Valle (Outlet)	October	No Data	No Data	No Data	No Data
		November	392	0.06	3.7	ND to 3
		December	424	0.08	4.2	ND to 1
North Bay Aqueduct	Barker Slough Pumping Plant	October	261	0.03	2.4	No Data
		November	218	0.03	1.9	No Data
		December	278	0.04	3.1	No Data

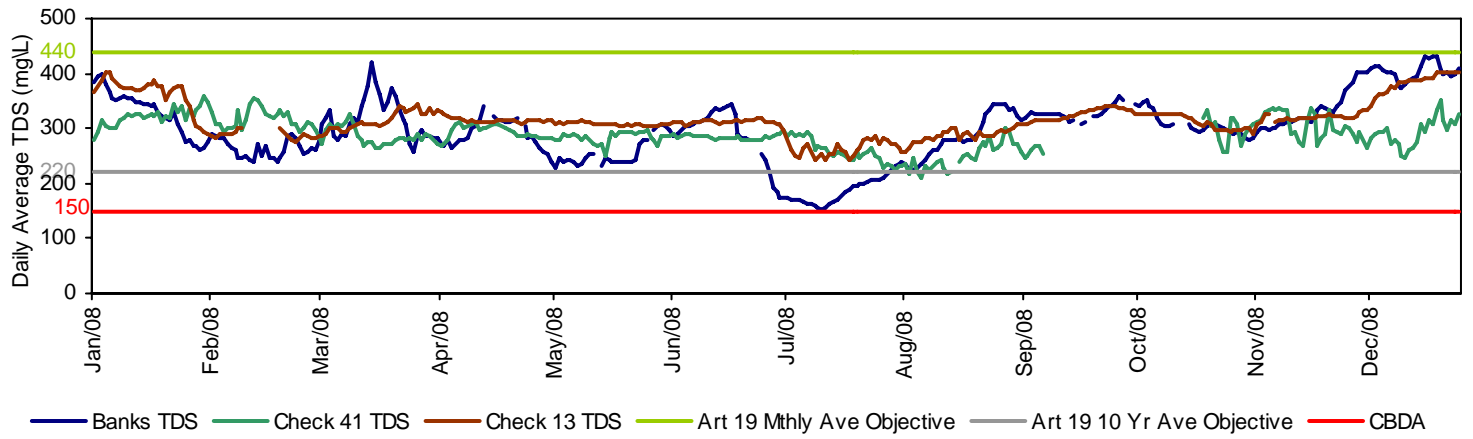
a: Article 19 Objective, Monthly Average (TDS 440 mg/L = EC 773 uS/cm)

b: California-Bay Delta Authority Target

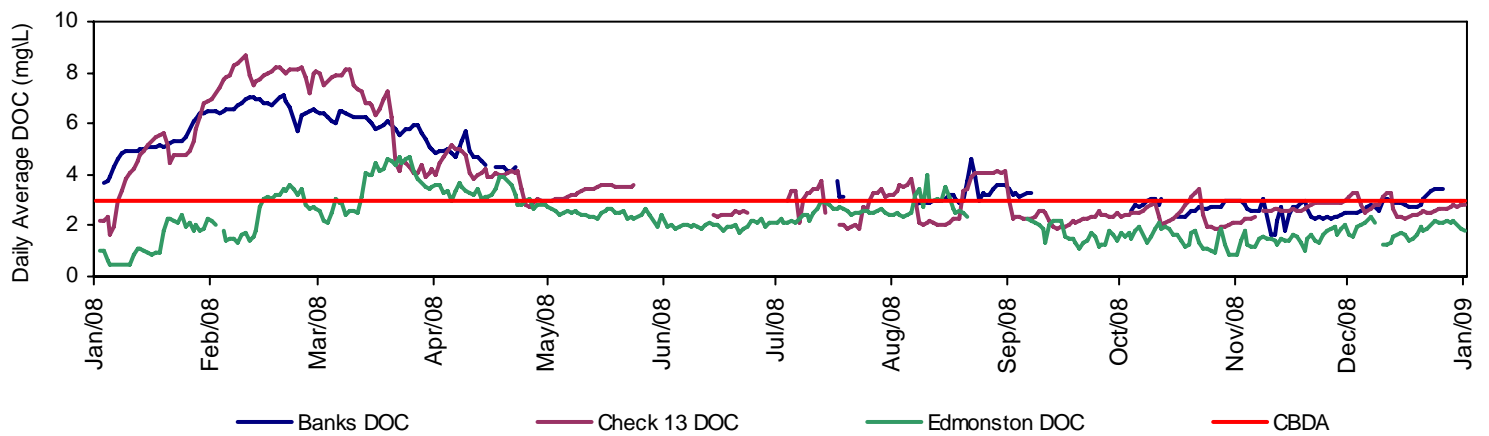
ND = Non detect

c: Dewatered for construction

### California Aqueduct - Calculated Total Dissolved Solids



### California Aqueduct - Calculated Dissolved Organic Carbon



### California Aqueduct - Calculated Bromide

